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TI - Halogen free fire-resistant epoxy resin compositions having good heat and moisture resistance and moldability for glass epoxy copper-clad laminates

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CODEN: JKXXAF

DT - Patent

LA - Japanese

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ICS B32B027/38;C08G59/62;C08J5/24;C08K13/02

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CC - 38-3 (Plastics Fabrication and Uses)

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PN - JP2000053845 A 20000222 JP 1998-234926 19980806 <-- JP2975349B B 19991110

PR - JP 1998-234926 19980806

AB - Title compns. comprise novolak-type epoxy resins, nitrogen-contg. novolak-type phenol resins, phosphates (5-30% per total compn.), inorg. fillers, and hardening accelerators. Thus, a 65% solid resin varnish compn. comprising cresol novolak epoxy resin 270, nitrogen-contg. phenol resin 185, aluminum hydroxide 100, PX 200 (phosphate) 60, and 2-ethyl-4-methylimidazole 0.1 parts was applied and impregnated on glass fabrics to give prepregs, a copper foil was placed on both sides of 8 layer of prepregs, and heat pressed to give a laminate with fire resistance (UL 94) V-0, good Cu peeling strength, solder heat resistance, solder moisture resistance, and moldability.

ST - halogen free fire resistant glass epoxy copper clad laminate; heat moisture fire resistant halogen free epoxy resin prepn

IT - Phenolic resins, uses

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (epoxy, novolak, optionally cresolic, N-contg. novolak phenolic resin-crosslinked; prepn. of glass epoxy copper-clad laminates using halogen free fire-resistant epoxy resin compns. having good heat and moisture resistance and moldability)

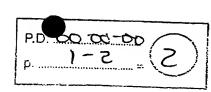
IT - Laminated materials

Laminated materials

(fire-resistant, heat- and moisture-resistant; prepn. of glass epoxy copper-clad laminates using halogen free fire-resistant epoxy resin compns. having good heat and moisture resistance and moldability)

Fillers

(inorg.; prepn. of glass epoxy copper-clad laminates using halogen free fire-resistant epoxy resin compns. having good heat



and moisture resistance and moldability)

IT - Fire-resisiant materials

Fire-resistant materials

(laminates, heat- and moisture-resistant; prepn. of glass epoxy copper-clad laminates using halogen free fire-resistant epoxy resin compns. having good heat and moisture resistance and moldability)

IT - Epoxy resins, uses

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (phenolic, novolak, optionally cresolic, N-contg. novolak phenolic resin-crosslinked; prepn. of glass epoxy copper-clad laminates using halogen free fire-resistant epoxy resin compns. having good heat and moisture resistance and moldability)

IT - Fireproofing agents
 (prepn. of glass epoxy copper-clad laminates using halogen free fire-resistant epoxy resin compns. having good heat and moisture resistance and moldability)

IT - Phosphates, uses

RL: MOA (Modifier or additive use); USES (Uses)
(prepn. of glass epoxy copper-clad laminates using halogen free
fire-resistant epoxy resin compns. having good heat and moisture
resistance and moldability)

IT - Glass, uses

RL: TEM (Technical or engineered material use); USES (Uses) (prepn. of glass epoxy copper-clad laminates using halogen free fire-resistant epoxy resin compns. having good heat and moisture resistance and moldability)

IT - Glass fiber fabrics

RL: TEM (Technical or engineered material use); USES (Uses) (prepn. of glass epoxy copper-clad laminates using halogen free fire-resistant epoxy resin compns. having good heat and moisture resistance and moldability)

IT - 931-36-2, 2-Ethyl-4-methylimidazole

RL: CAT (Catalyst use); USES (Uses)
(hardening accelerator; prepn. of glass epoxy copper-clad laminates using halogen free fire-resistant epoxy resin compns. having good heat and moisture resistance and moldability)

IT - 21645-51-2, Aluminum hydroxide, uses 26444-49-5, Cresyl diphenyl phosphate 57583-54-7, Reofos RDP 139189-30-3, PX 200 RL: MOA (Modifier or additive use); USES (Uses) (prepn. of glass epoxy copper-clad laminates using halogen free fire-resistant epoxy resin compns. having good heat and moisture resistance and moldability)

IT - 7440-50-8, Copper, uses

RL: TEM (Technical or engineered material use); USES (Uses) (prepn. of glass epoxy copper-clad laminates using halogen free fire-resistant epoxy resin compns. having good heat and moisture resistance and moldability)